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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,511

11/28/2003

Kenneth Carless Smith

13180-12

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10/11/2006

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EXAMINER

BAXTER, ZOE E

ART UNIT

PAPER NUMBER

3735

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,511	Applicant(s) SMITH ET AL.	
	Examiner Zoe E. Baxter	Art Unit 3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3-17 and 20-29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/2/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figures 8-14 are handwritten. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: figure 2 reference numbers 64 and 70 and figure 14 reference number 160 are not shown in the figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the

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description: figure 14 reference number 16. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: the claims should be on a separate sheet of paper.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Organ et al. (U.S. Patent No. 6768921) in view of Skladnev et al. (U.S. Patent No. 6723049). Organ et al. teach a system comprising a first body part module and a second body part module, described as a right and left breast electrode array (column 19 line 29). Each electrode array injects a current into a body part and receives a corresponding voltage signal (column 11 lines 34-45). Organ et al. also teaches an impedance module (figure 12 reference 111), which measures the impedances for each pair of electrodes, combined in each electrode array (column 20 line 26-column 22 line 22). Organ et al. fail to teach a correction module for obtaining a correction value. Skladnev et al. teach a system which measures impedance and includes a correction factor (column 10 line 59-column 11 line 25). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Organ et al. to include the use of a correction factor similar to that of Skladnev et al. in order to nullify production variation in the electrodes while at the same time retaining tissue discrimination (Skladnev et al. column 10 lines 59-65).

7. Regarding claim 18 Organ et al. teach a method for diagnosing the possibility of disease comprising, injecting a first current into the first body part, receiving a corresponding first voltage signal, injecting a second current into a second body part, receiving a corresponding second voltage signal, calculating the first and second impedance values (column 22 line 26-column 26 line 22) and use them to diagnose the possibility of disease (column 7 lines 33-50). Organ et al. fail to teach the method of obtaining a calculation factor. Skladnev et al. teach a method of measuring impedance

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using a correction factor (column 10 line 59-column 11 line 25). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Organ et al. to include the use of a correction factor similar to that of Skladnev et al in order to nullify production variation in the electrodes while at the same time retaining tissue discrimination (Skladnev et al. column 10 lines 59-65)

8. Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Organ et al. in view of Skladnev et al. as applied to claim 1 above, and further in view of Hubelbank et al. (U.S. Patent No. 5197479). As stated above Organ et al. teach a system comprising a first body module, a second body module and an impedance measuring module. Skladnev et al. teach a correction factor. Neither Organ et al. nor Skladnev et al. teach that the inherent impedance includes non-body parts of the system. Hubelbank et al. teach that system impedance is made up of non-body sources and skin (column 4 lines 20-27). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the inventions of Organ et al. and Skladnev et al. similar to that of Hubelbank et al. in order to include the inherent impedance including both non-body and skin impedance to better represent inherent impedance.

9. Regarding claim 19 as stated above Organ et al. teach a method comprising injecting a first current into the first body part, receiving a corresponding first voltage signal, injecting a second current into a second body part, receiving a corresponding second voltage signal, calculating the first and second impedance values (column 22 line 26-column 26 line 22) and use them to diagnose the possibility of disease (column 7 lines 33-50). Skladnev et al. teach a method of using a correction factor. Neither

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Organ et al. nor Skladnev et al. teach that the inherent impedance includes non-body parts of the system. Hubelbank et al. teach that system impedance is made up of non-body sources and skin (column 4 lines 20-27). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the inventions of Organ et al. and Skladnev et al. similar to that of Hubelbank et al. in order to include the inherent impedance including both non-body and skin impedance to better represent inherent impedance.

Allowable Subject Matter

10. Claims 3-17 and 20-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art of record fail to disclose or fairly suggest a method and apparatus comprising a correction module including a magnitude and phase correction factor.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zoe E. Baxter whose telephone number is 571-272-8964. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571-272-4730. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ZEB

Zoe E. Baxter
Examiner
Art Unit 3735



Charles A. Manner, II
SPE, Art Unit 3735